

521,971

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

21 JAN 2004

(43) International Publication Date
5 February 2004 (05.02.2004)

PCT

(10) International Publication Number
WO 2004/011484 A2

BEST AVAILABLE COPY

(51) International Patent Classification⁷:

C07K

(74) Agent: LOCKHART, Helen, C.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210 (US).

(21) International Application Number:

PCT/US2003/023425

(22) International Filing Date: 25 July 2003 (25.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/398,801 25 July 2002 (25.07.2002) US

(71) Applicant (for all designated States except US): THE GENERAL HOSPITAL CORPORATION [US/US]; 55 Fruit Street, Boston, MA 02114 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CALVI, Laura, M. [US/US]; 78 Stoneleigh Court, Rochester, NY 14618 (US). ADAMS, Gregor, B. [US/US]; 20 Revere Street, Boston, MA 02114 (US). KRONENBERG, Henry, M. [US/US]; 48 Hastings Road, Belmont, MA 02478 (US). SCADDEN, David, T. [US/US]; 62 Lexington Street, Weston, MA 02498 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PARATHYROID HORMONE RECEPTOR ACTIVATION AND HEMATOPOIETIC PROGENITOR CELL EXPANSION

1 α .1 collagen
gene
promoter
(2.3kb)pcDNA1
polyadenylation
signal

hPTH/PTHrP R

H223R
mRNA(57) Abstract: The invention relates to methods for manipulating hematopoietic progenitor cells and related products. In one aspect the invention relates to the use of agents that activate a PTH/PTHrP receptor to enhance the growth and maintenance of hematopoietic progenitor cells *in vivo* and *in vitro*, to enhance mobilization of hematopoietic stem cells, to improve the efficiency of targeting cells to the bone marrow, and/or to modulate hematopoietic progenitor cell function.

WO 2004/011484 A2